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May 30, 1996

William F. Caton Acting Secretary Federal Communications Commission 1919 M Street, N.W., Room 222 Washington, D.C. 20554

> Re: Reply Comments in Rule Making Proceeding 1996 Act Local Competition Implementation CC Docket No. 96-98

Dear Mr. Caton:

On behalf of Bay Springs Telephone Co., Crockett Telephone Co., National Telephone Company of Alabama, Peoples Telephone Company, Roanoke Telephone Company, and West Tennessee Telephone Company, there is transmitted herewith an original and sixteen (16) copies of their reply comments in response to the Commission's Notice of Proposed Rule Making, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, FCC 96-182, released April 19, 1996. Sufficient copies are being filed so that each Commissioner may receive an individual copy.

Please direct any questions regarding this filing to undersigned counsel.

Sincerely yours,

James U. Troup L. Charles Keller

Enclosures

cc: Ms. Janice Myles, CCB (by hand)
Int'l Transcription Svc. (by hand)

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# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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In the Matter of )
Implementation of the Local )
Competition Provisions in the ) CC Docket No. 96-98
Telecommunications Act of 1996 )

JOINT REPLY COMMENTS OF
BAY SPRINGS TELEPHONE CO., INC.; CROCKETT TELEPHONE CO.;
NATIONAL TELEPHONE COMPANY OF ALABAMA; PEOPLES TELEPHONE COMPANY;
ROANOKE TELEPHONE COMPANY; and WEST TENNESSEE TELEPHONE COMPANY

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May 30, 1996

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#### SUMMARY

In these reply comments, the Companies supplement the points made in their initial comments with an industry group study (attached as Exhibit 1). The Companies also respond to certain arguments made by other commenters in this proceeding.

With these reply comments, the Companies supplement the record in this proceeding with a recent industry-group study which demonstrates a number of points the Companies made in their initial comments in this proceeding. This study confirms the unique character of rural service areas, and demonstrates the clear threat that cream-skimming and other abusive practices presents to rural subscribership levels.

The Companies also respond to arguments made by certain other commenters in this proceeding. The Companies urge the FCC to implement strict, national standards to ensure that the public interest objectives Congress built into the rural telephone company exception are given proper weight when states consider requests to implement competition in rural service areas. Beyond that, the Companies agree with other rural LEC commenters that determinations under Section 251(f)(1) should be made by the states.

The FCC's implementing regulations should also ensure that state commissions cannot grant certifications of public convenience and necessity to provide service in a rural telephone company's service area until the state commission has made the public interest findings required by Section 251(f). Would-be competitors

have already requested statewide certification in many jurisdictions without first making a bona fide request for interconnection from the affected rural LECs. Granting such certification before a bona fide request has been made could leave the states without jurisdiction to make the necessary Section 251(f)(1) findings.

In addition, the FCC should adopt national standards to govern implementation of competition in cases where the rural exemption is terminated. Prices for unbundled network elements must be set above TSLRIC to ensure that joint, common, historical, and embedded network costs can be recovered. These costs have nothing to do with a rate of return proceeding, and their recovery is contemplated by the 1996 Act. Rural telephone companies should not be required to unbundle their networks at the sub-loop level because such unbundling is generally infeasible in rural networks. Further, the economics of rural exchanges would make implementation of a bill-and-keep scheme for transport termination unworkable, even on an interim basis. Carriers should not be allowed to avoid access charges by purchasing unbundled network elements. Had Congress intended such a radical change in the access charge system, it would have made this clearer.

# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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In the Matter of	,				
Implementation of the Local	)				
Competition Provisions in the	)	CC	Docket	No.	96-98
Telecommunications Act of 1996	)				
	)				

JOINT REPLY COMMENTS OF
BAY SPRINGS TELEPHONE CO., INC.; CROCKETT TELEPHONE CO.;
NATIONAL TELEPHONE COMPANY OF ALABAMA; PEOPLES TELEPHONE COMPANY;
ROANOKE TELEPHONE COMPANY; and WEST TENNESSEE TELEPHONE COMPANY

To: The Commission

Bay Springs Telephone Co., Inc.; Crockett Telephone Co.; National Telephone Company of Alabama; Peoples Telephone Company; Roanoke Telephone Company; and West Tennessee Telephone Company (the "Companies"), by counsel, hereby file their joint reply comments in the above-referenced proceeding.

#### I. Introduction.

In their initial comments in this proceeding, the Companies provided a detailed discussion of the compelling public interest considerations that are presented by the implementation of competition in service areas presently served by rural telephone companies. The Companies discussed how, because of the realities of rural telephone service, indiscriminate implementation of competition in these areas is likely to lead to reductions in telephone subscribership and service quality. Congress recognized these powerful public interest considerations in the

The Companies filed initial comments in this proceeding in response to In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Notice of Proposed Rulemaking in CC Docket No. 96-98 FCC 96-182

Telecommunications Act of 1996 (the "1996 Act")<sup>2</sup> and required that they be weighed along with the goal of competition in implementation proceedings.

In these reply comments, the Companies wish to supplement the record on these points with additional factual information that will be of value to the Commission in these proceedings. The Companies also take this opportunity to respond to specific assertions made by a few other commenters.

# II. Indiscriminate Implementation of Competition in Rural Service Areas Will Harm Consumers by Reducing Telephone Subscribership.

In their initial comments, the Companies described the unreasonable cost/revenue pressures that would befall rural telephone companies if competition were introduced indiscriminately into rural service areas. The Companies also described how this pressure would inevitably lead to price increases for subscribers to the rural network. On that basis, the Companies urged the FCC to adopt specific, national rules governing states' consideration of bona fide requests to implement competition in rural service areas.

Attached as Exhibit 1 are excerpts from an industry-group study that confirms the unique character of rural service areas, and shows how price increases would cause rural consumers to

<sup>&</sup>lt;sup>2</sup> Pub. L. No. 104-104, 110 Stat. 56 (1996).

disconnect their basic telephone service.<sup>3</sup> Chapter 2 of the OPASTCO study reveals how the costs of serving rural service areas are substantially higher than in other areas, and that those costs must be spread over a smaller subscriber base and recovered over a longer period of time. These differences are extremely relevant to the Companies' initial comments regarding the economic burden of implementing competition in rural service areas.

Chapter 5 of the OPASTCO study discusses the results of a survey of rural telephone subscribers in which respondents were asked to assess the likelihood they would disconnect their basic telephone service as a result of monthly price increases of \$5, \$10, \$15, or \$25. Alarmingly, fully 12.9 percent of respondents indicated they would disconnect service in response to a price increase of only \$10. A price increase of that magnitude is certainly within the realm of possibility if competition is implemented improperly given the small size of rural subscriber bases. Even assuming a rate increase of only \$5, however, the survey found that 4.3 percent of subscribers would disconnect Because rural subscribership levels are already lower service.

Organization for the Protection and Advancement of Small Telephone Companies (OPASTCO), <u>Keeping Rural America Connected:</u> Costs and Rates in the Competitive Era (1994). The study focuses on the potential effect of eliminating universal service subsidies in rural service areas, a subject that is relevant to the Companies' comments. However, the significance of the study's findings about the character of rural service areas and the effects of increased rural telephone rates on subscribership levels are by no means limited to universal service concerns.

than urban levels, even this result is antithetical to the goals of increasing telephone subscribership, particularly in rural areas.

These facts clearly demonstrate that it would be a mistake to adopt the position urged by one commenter, who suggests that the 1996 Act's rural telephone company exemption should be construed narrowly. TCC asserts that Congress only provided the exemption to allow for rural LECs to respond to "timing issues" related to unbundling their networks, but TCC provides no substantiation for this claim.

In fact, Congress clearly recognized that other public interest considerations besides competition must also be weighed in implementing competition in rural areas. As a result, the 1996 Act contains the rural exemption, which can only be terminated if the state commission has determined that a request for interconnection is not unduly economically burdensome, is technically feasible, and is consistent with universal service concerns. The Act also contains Section 253(b), which allows states to impose regulations,

<sup>4 &</sup>lt;u>Id.</u> at 5-16, fig. 5.10.

Comments of Telecommunications Carriers for Competition ("TCC") at 51 et seq. The Companies also note the aggressive approach Telefonica Larga Distancia de Puerto Rico proposes under Section 251(f)(2). Though not directly relevant to the Companies' position with respect to Section 251(f)(1), the Companies oppose any such approach which is hostile to the policy goals of Section 251(f).

<sup>&</sup>lt;sup>6</sup> <u>Id.</u> at 53.

<sup>1996</sup> Act, sec. 101, § 251(f)(1). See also the Companies' Comments at 7-8.

even if they might result in barriers to entry, to further universal service, protect public safety and welfare, ensure service quality, and safeguard consumers' rights. 8 Competition is not the only public interest concern recognized in the 1996 Act.

TCC argues that the "consumers in rural America should be given a choice of carriers and should receive the benefits of competition." The Companies wholeheartedly agree. But the Commission must also ensure that remote rural consumers have access to affordable basic service. The Commission should therefore adopt the concrete national standards described in the Companies' initial comments.

III. The FCC Should Prohibit State Commissions From Granting Certification to Provide Service in a Rural Telephone Company's Service Area Until the Rural Telephone Company Has Received a Bona Fide Request and the State Commission Has Completed the Section 251(f) Proceeding.

The Companies observe that most commenters seem to favor strong national standards for implementing Sections 251 and 252, though most other rural and independent LEC commenters favored leaving Section 251(f)(1)(B) determinations solely in the states' discretion. The Companies recognize that termination of the rural exemption is an area of state authority under the 1996, and that the unique characteristics of each rural network make individual determinations important. Indeed, as many rural LEC commenters

<sup>8 1996</sup> Act, sec. 101, § 253(b).

g TCC Comments at 53.

observe, a "one-size-fits-all" approach to implementing Sections 251 and 252 would likely harm rural LECs disproportionately.

The Companies maintain, however, that a set of minimum federal standards for states' treatment of the rural exemption including a reassurance regarding states' authority under Section 253(b), as described in the Companies' initial comments, is necessary to ensure the protection of rural LECs. As the Companies observed in their initial comments, states are already facing requests by would-be competitors for certificates of public convenience an necessity to provide service in areas that include rural telephone companies' service areas. Once such certification is granted, some states lack procedural safeguards to ensure that the findings required by Section 251(f)(1) are made.

For example, Mississippi is currently considering certification rules that do not address the public interest considerations enumerated in Section 251(f)(1). In Iowa, AT&T has requested statewide certification from the state commission, but has not yet made any bona fide requests for interconnection with rural telephone companies. If Iowa grants AT&T statewide

Often, these requests are for statewide certification. See the Companies' comments at 12-14.

In re Order of the Mississippi Public Service Commission Establishing a Docket to Consider Competition in the Provision of Local Telephone Service, Mississippi Public Service Commission, Docket No. 95-UA-358 (1996).

In re AT&T Communications of the Midwest, Inc., Iowa Utilities Board, Docket No. TCU-96-1 (1996).

certification, existing state interconnection and unbundling requirements<sup>13</sup> would be triggered without any provision for the detailed findings required by Section 251(f)(1).

addition contravening Congress's intention In to by disregarding the three-part analysis set out in Section 251(f)(1), such a result would be contrary to the specific reservation of power to the states in section 253(b), which allows states to adopt requirements to competitively neutral preserve and advance universal service, protect the public safety and welfare, ensure service quality, and protect consumers' rights. Indeed, it appears that Congress envisioned that state certification proceedings would involve a more rigorous analysis than that required by Section 251(f)(1) to protect the public interest. To implement Congress's intent and the public interest, the Commission's implementing regulations should make clear that the 1996 Act's preemptive power prevents states from entertaining certification requests for areas including rural service areas until a bona fide request has been made to the rural telephone company and the requirements of Section 251(f)(1) have been satisfied.

Although the Company's advocacy of strong national standards governing state consideration of these issues might appear to differ from other rural and independent telephone companies' proposals to leave these determinations to the states, no conflict actually exists. This proposal still reserves to the state

<sup>&</sup>lt;sup>13</sup> 199 Iowa Admin. Code § 38.3 (1996).

commissions actual authority to make the determinations; thus, there is no direct conflict between the Companies' recommendations and those of other rural LEC commenters.

## IV. The FCC Should Adopt National Standards to Protect Rural Consumers in Cases Where Competition is Implemented in a Rural Service Area.

As the Companies demonstrated in their initial comments, 14 specific national standards are necessary to guide states in instances where they have terminated the Section 251(f) rural exemption. This section responds to specific recommendations made by other commenters which could threaten the viability of rural telephone companies, and therefore imperil service to rural consumers.

## A. Prices for Unbundled Network Elements and Resale Services Must be Set Above TSLRIC.

Several Commenters argue that the Commission should mandate the use of LRIC or TSLRIC studies to determine "cost" based prices for unbundled network elements and resale. Such standards are inappropriate for rural telephone companies, however, because they fail to allow rural LECs to recover their relatively high levels of investment in infrastructure and their greater risk assumed in such investments.

Some commenters argue that any consideration of "historical" or "embedded" costs represents the type of "rate-of-return" methodology specifically forbidden by Section 252(d)(1)(A). These

See the Companies' Comments at 14-19.

arguments miss the point, however. Although the Commission's rate-of-return regulations have generally considered such factors as historical and embedded costs, the focus of such regulations has consistently been the carrier's rate of return<sup>15</sup> -- hence, the name.

The Companies are not arguing that prices for unbundled elements or resale services should have anything to do with rural telephone companies' rates of return. Rather, the Companies believe that any assessment of a rural telephone company's "cost" in providing a network element or resale service must include all appropriate elements of the rural LEC's costs. These include the rural LEC's investment in infrastructure, considered in light of the size of its subscriber base and the risk reflected thereby. It would also take into consideration rural telephone companies' higher degree of fixed costs. For example, rural telephone companies generally have few employees, each of which performs several functions. Thus, less cost is "avoided" when services are sold wholesale rather than retail. Only by ensuring these factors are taken into account can the Commission ensure that the public interest is served and rural consumers are protected. To incorporate these cost elements, prices must be set above TSLRIC.

The Companies observe that virtually all rural LECs filing comments in this proceeding echoed these pricing concerns. Even more significantly, however, similar viewpoints are offered by

See 47 C.F.R. § 65.700 et seq.

consumer advocacy groups and the National Exchange Carrier Association ("NECA"), which is entrusted with administering the Universal Service Fund. NECA indicates that the Commission "should use a methodology that permits LECs, especially rural incumbent LECs, to recover their full embedded costs."16 Similarly, the Office of the Ohio Consumers' Counsel ("OCC"), an agency entrusted protecting the interests of the state's residential telecommunications consumers, agrees that network element prices "should recover at least TSLRIC and a markup over TSLRIC to refect a reasonable allocation of joint and common costs."17 The Consumer Federation of America and the Consumers Union favor this approach as well, arguing that local network costs must be shared by all users, and that prices should be set somewhere above TSLRIC (but below stand-alone cost). 18 The Companies agree that only a methodology that sets prices above TSLRIC to allow for recovery of embedded, joint, and common costs will preserve the 1996 Act's goals of competitive neutrality.

## B. Rural Telephone Companies Should Not Be Required to Unbundle at the Sub-Loop Level.

A number of commenters suggest that incumbent LECs should be required to unbundle discrete elements of the local loop such as

<sup>&</sup>lt;sup>16</sup> NECA Comments at 9.

<sup>17 &</sup>lt;u>Id.</u> at 25.

Consumer Federation of America and Consumers Union Comments at 33.

loop concentrator/multiplexer, and gool distribution. feeder. 19 The Companies reiterate that sub-loop unbundling is unlikely to be technically feasible in many rural networks. where it is feasible from a technical standpoint, it is likely to create an unreasonable economic burden on the operator of the rural At least as to rural telephone companies, exchange. Commission's implementing rules should not require unbundling of the local loop beyond interconnection on the trunk side of the switch with an entire local loop treated as a single network element.

C. The Commission Should Not Mandate Bill-and-Keep as a Reciprocal Compensation Scheme for Transport and Termination of Traffic, Even on an Interim Basis.

While commenters supported bill-and-keep many arrangements for transport and termination of traffic, the Companies reiterate their position that such arrangements are inappropriate for rural telephone companies. As the Commission itself notes, bill-and-keep should not be used in situations where "at least one carrier has a non-zero incremental termination cost and the elasticity of demand is significant."20 These conditions often exist in rural exchanges. Incremental termination costs are higher for small LECs because the smaller size of their networks reduce economies of scale. Price elasticity of demand tends to be high in rural markets, as shown by the findings in Chapter 5 of the

See, e.g., Telecommunications Resellers Association Comments.

<sup>&</sup>lt;sup>20</sup> <u>Notice</u> at 83 para. 242.

1). Commission's OPASTCO study (Exhibit Therefore, the implementing regulations should ensure that rural telephone companies are not forced to accept bill-and-keep arrangements in compensation for transport lieu actual reciprocal of termination of traffic.

## D. Congress Did Not Intend to Allow Carriers to Avoid Access Charges by Purchasing Unbundled Network Elements.

Not surprisingly, the interexchange carriers ("IXCs") argued in their comments that they should be able to circumvent the Part 69 access charge regime by purchasing unbundled network elements to serve the access function, some arguing that the provisions of the 1996 Act abolish the access charge rules. 21 Also not surprisingly, only the IXCs seem to share this interpretation of the statute. And, indeed, the IXCs' position cannot be correct; had Congress intended such a sweeping change, it would have said so unambiguously. The Commission has indicated that it intends to address access charge reform "in the very near future"; 22 at the very least, the Commission's regulations implementing Sections 251 and 252 should maintain the status quo until the conclusion of the access charge proceeding. Section 251(q) of the Act maintains the status quo until the Commission changes its access charge rules. This will prevent the Commission's order in this docket from effectively predetermining the results of access charge reform.

<sup>21</sup> See LDDS WorldCom Comments.

<sup>&</sup>lt;sup>22</sup> <u>Notice</u> at 52 para. 146.

#### V. Conclusion.

The OPASTCO study attached as Exhibit 1 demonstrates the important role rural telephone companies play in keeping rural Americans connected to basic telephone service. This showing emphasizes the important public interest goals codified in the 1996 Act's rural telephone exemption. The Commission's implementing regulations should therefore ensure that competition is not implemented in rural service areas without the public interest analysis mandated in the 1996 Act. The Commission's rules should prohibit a state commission from granting certification to serve a rural telephone company's service area until that rural telephone company has received a bona fide request and the state commission has concluded the proceeding mandated by Section 251(f). the in subsequent Commission should also clarify that, certification proceedings, state commissions may impose additional conditions on certification to preserve universal service, protect consumers, ensure quality service and to protect public safety and welfare.

In cases where the rural exemption is eliminated by a state commission, the Commission should ensure that the public interest is protected. Prices for unbundled network elements and resale services must be set at a level that allows rural telephone companies to recover their relatively higher costs for their networks, including a premium for the additional risk they assumed given the size of their service areas. Such prices would

necessarily be above TSLRIC. Also, rural telephone companies should not be required to unbundle their local loops beyond providing trunk-side access to the switch port with the entire local loop treated as a single network element. Further, rural telephone companies should not be subject to forced bill-and-keep regimes that would prevent them from recovering their relatively higher termination costs. Finally, the Commission's implementing regulations should clarify that Congress did not intend to allow interexchange carriers to avoid access charges by purchasing unbundled network elements.

WHEREFORE, Bay Springs Telephone Co., Inc.; Crockett Telephone Co.; National Telephone Company of Alabama; Peoples Telephone Company; Roanoke Telephone Company; and West Tennessee Telephone Company hereby request that the Commission incorporate the recommendations made in their initial comments and these reply

comments in its regulations implementing the local competition provisions of the Telecommunications Act of 1996.

Respectfully submitted,

BAY SPRINGS TELEPHONE CO., INC.; CROCKETT TELEPHONE CO.; NATIONAL TELEPHONE COMPANY OF ALABAMA; PEOPLES TELEPHONE COMPANY; ROANOKE TELEPHONE COMPANY; and WEST TENNESSEE TELEPHONE COMPANY

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May 30, 1996

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# JOINT REPLY COMMENTS OF: BAY SPRINGS TELEPHONE COMPANY, INC. CROCKETT TELEPHONE COMPANY NATIONAL TELEPHONE COMPANY OF ALABAMA PEOPLES TELEPHONE COMPANY ROANOKE TELEPHONE COMPANY WEST TENNESSEE TELEPHONE COMPANY

### EXHIBIT 1

## Keeping Rural America Connected: Costs and Rates in the Competitive Era

A study for the Organization for the Protection and Advancement of Small Telephone Companies (OPASTCO) by John Staurulakis Inc. and Patricia Lum and funded by OPASTCO and firms throughout the rural telecommunications industry.



Organization for the Protection and Advancement of Small Telephone Companies 21 Dupont Circle NW, Suite 700 Washington, DC 20036 202/659-5990

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## The Costs of Providing Universal Service to Rural America



Words appearing in BOLD are defined in Appendix A-Glossary

The costs of providing telephone service to rural America are much higher than the costs of providing service to the more urban areas of the country. Federal and state regulators must remember this fact as they restructure and remove regulations in response to competitive pressures and rapid changes in technology. Rural local exchange carriers (LECs) face higher costs both for local loops (the connections from the LEC central office to subscribers' premises) and for switching (routing calls to their proper destination)

Four factors contribute to rural LECs' higher costs:

- smaller and more geographically dispersed populations;
- a higher proportion of residential versus business subscribers;
- higher unit costs for usage-sensitive equipment because rural LECs cannot take advantage of economies of scale; and
- higher loop-related investments due to longer loops and the remoteness of the areas they serve.

The remainder of this chapter examines each of the above conditions in greater detail.

## Rural LECs Serve Smaller and More Geographically Dispersed Populations

Rural LECs in the United States serve fewer subscribers than their urban counterparts, yet must provide service to large geographic areas. In a recent survey of its LEC members' 1,200 study areas, the National Exchange Carrier Association (NECA) found that more than 50 percent of the LECs serve areas in excess of 200 square miles per exchange. Rural LECs average 6.3 subscribers per route mile of telephone line and 4.4 subscribers per square mile (see Figure 2.1). Seven states actually have density characteristics of less than one subscriber per square mile served. Figures for Bell operating companies (BOCs) differ dramatically, averaging 130 subscribers per route mile and more than

<sup>&</sup>lt;sup>1</sup>National Exchange Carrier Association, "Building the Telecommunications Infrastructure in Rural America: A Member Study,"

_	Subscribers Served	Total Route Miles of Line	foral Square Miles Served	Subscribers Per Route Mile of Line	Subscribers Per Square Mile Served	
State	(A)	(B)	_ (C)	(D)=(A)÷(B)	(E)=(A)÷(C)	
Alabama	160,989	21,189	11,830	7.6	13.6	
Alaska	98,554	7,270	3 <b>4</b> 0,7 <b>5</b> 7	13.6	0.3	
Arizona	150,912	14,823	58,869	10.2	2.6	
Arkansas	221,442	32,148	<b>2</b> 2,957	6.9	9.6	
California	62,453	8,812	10,762	7.1	5.8	
Colorado	31.734	9,751	23,080	3.3	1.4	
Connecticut	NA	NA	14 <b>V</b>	NA	NA	
Delaware	VA	NA	1 <b>1</b> A	NA	NA	
Florida	111,643	12,117	8,616	9.2	13.0	
Georgia	396.989	63,529	28.628	6.2	13.9	
Hawaii	NA	NA	NA.	NA	NA	
Idaho	19,396	5,694	29,836	3.4	0.7	
Illinois	89,120	16,754	9,028	5.3	9.9	
Indiana	93,642	12,868	7.270	7.3	12.9	
lowa	167 709	<b>30</b> ,013	19,693	5.6	8.5	
Kansas	179,045	40,224	39,1-35	4.5	4.6	
Kentucky	219,287	<b>30</b> .103	18,991	7.3	15.7	
Louisiana	130,283	14,066	2.1.9	9.3	10.7	
Maine	86.866	6,729	796	12.9	11.0	
Maryland	4,933	309	1.4	16.0	77 1	
Massachusetts	2.472	0.00 i	7	34.8	91.6	
Michigan	154 219	18,563	3 1(6	8.3	11.7	
Minnesota	308 132	63,262	45 030	4.9	6.8	
Mississippi	62,910	11,522	7,699	5.5	8.2	
Missouri	<b>29</b> 3 163	51.6(1	32,495	5.7	9.0	
Montana	41.692	31,568	90.798	1.3	9.0 0.5	
Nebraska	73,692	24,824	32 644	3.0	2.3	
Nevada	6,186	1 067	12.523			
New Hampshire	26,793	1,899	-2.523 	5.8 14.1	0.5	
New Jersey					30.9	
New Mexico	152.154 28,572	1,386	393	109.8	387.2	
New York	26,572 130,249	18,337 10,730	59,719	1.6	0.5	
North Carolina	381.361	10.739	5,975	12.1	21.8	
North Dakota		40,602	12,703	9.4	30.0	
Ohio	65,192	34,700	45,652	1.9	1.4	
Oklahoma	23,710	3,050	1,330	7.8	17.8	
	144,641	31,450	31,629	4.6	4.6	
Oregon	61,303	11,908	21,266	5.1	2.9	
Pennsylvania	464.793	40,126	12,583	11.6	36.9	
Rhode Island	NA 200 aaa	NA	NA	NA	NA	
South Carolina	<b>263</b> ,362	24,521	10.22.	10.7	25.8	
South Dakota	61,482	<b>30,3</b> 07	42,583	2.0	1.4	
Fennessee	259,489	29,736	16,223	8.7	16.0	
Texas	211,026	<b>62,20</b> 3	88,025	3.4	2.4	
Jtah 'asmast	13,190	3,844	20,655	3.4	0.6	
Vermont Grainia	12,963	1,135	562	11.4	23.1	
/irginia	53,174	7,362	3,540	7.2	15.0	
Washington	34,111	4,460	2 <b>,93</b> 0	7.6	11.6	
West Virginia	60,742	<b>8,53</b> 8	<b>6,86</b> 3	7.1	8.9	
Wisconsin	358,594	47,216	26,456	7.6	13.6	
Wyoming	14,034	3,580	72,785	3.9	0.2	
Total	<b>5,988</b> ,398	945,976	1,361,342	6.3	4.4	

330 subscribers per square mile of service area? The NFOC survey also found that the its LEC members, which serve 6.6 million subscriber access lines seems a verage of 1.275 access lines per central office versus the BOC average of 11,000 access lines per on that office

#### Rural LECs Have a Higher Proportion of Residential Versus Business Subscribers

The proportion of business subscribers to total subscribers is lower in rural areas than in urban areas. A recent study of Rural Electrification Administration (REA) telephone borrowers found that business subscribers account for approximately 17.6 percent of their total subscribers, while the BOCs report that business subscribers account for 25 percent of their total subscribers.<sup>3</sup> In addition, more than 50 percent of BOC business subscribers have multiple telephone lines, while less than 10 percent of REA borrowers' business subscribers are multi-line.

This lower percentage of business subscribers has a magnified impact on rural LECs because multi-line business subscribers usually are the high-volume toll or long distance users, and rural LECs derive a proportionately larger share of their revenue from toll and access services than the BOCs do. (See Chapter 3 for an explanation of toll and access revenues.

The REA survey shows that in 1992, the 899 reporting borrowers earned approximately 25 percent of their total revenues from local telephone services. The BOCs' local service revenues averaged approximately 47 percent of their total operating revenues in 1992.

Thus, when a small LEC loses one large business subscriber, it is much more likely than a BOC would be to lose a significant amount of its revenue. Also, any attempt by competitors to bypass rural LECs, by providing an alternate means for subscribers to route toll calls directly to an interexchange carrier (IXC), would be aimed first at the larger business subscribers.

## Rural LECs Have Higher Unit Costs and Lack Economies of Scale

Because small, rural LECs serve fewer subscribers than their urban counterparts, they have less opportunity to take advantage of economies of scale. This means higher per-unit costs for equipment and higher access charge rates being charged to IXCs. Rural LEC representatives worry that cost and rate differences will result in fewer IXCs serving rural areas and ultimately lead to the deaveraging of toll rates in areas where traffic-sensitive (TS) access rates are higher.

Under the concept of geographic toll rate averaging, rates are averaged over broad geographic areas so that all subscribers pay the same amount per minute of use (MOU).<sup>5</sup> The costs of providing service to high-cost areas are averaged with the costs of providing service to low-cost areas, thereby allowing everyone to pay the same rate, although some subscribers pay rates that exceed their cost of service while others pay rates that are below their cost of service.

<sup>&</sup>lt;sup>2</sup>U.S. Department of Commerce, Census Bureau, 1990.

<sup>&</sup>lt;sup>3</sup>Rural Electrification Administration, 1992 Statistical Report, Rural Telephone Borrowers.

<sup>&</sup>lt;sup>4</sup>Federal Communications Commission, "Statistics of Communications Common Carriers," 1991/1992 edition.

<sup>&</sup>lt;sup>5</sup>MOU can be minute or minutes of use